

学位论文概要**An Examination of the International Trade Tourism between Countries with Similar Income Levels**

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This research is an examination of the international trade tourism between countries with similar domestic demand conditions and income levels. The target country for this research is the United States of America and its equally high-income trading partners. Firstly, this research examines the intra-industry trade (IIT) between countries with similar income levels. Then, under the same data set, the author measures the trade flow differentiation. Finally, the author examines the orthodox trade theories on the data to see if the predicted phenomenon in international tourism does occur as expected.

This study has well established three points: firstly, the IIT is high between countries with similar income levels, secondly, the trade flow differentiation of this industry is fundamentally vertically-inclined between countries with similar income levels and thirdly, the empirical results of this research clearly demonstrate that the IIT phenomenon in international tourism does occur as expected in the Linder Hypothesis, but the presupposition of horizontal differentiation in trade flow among countries with similar factor endowments and income levels does not occur as expected.

Keywords: intra-industry trade, Linder Hypothesis, Grubel-Lloyd index, horizontal intra-industry, vertical intra-industry trade

1. INTRODUCTION

Tourist flows are a form of spatial interaction between two areas with the destination area having a surplus of a commodity that pulls the individual (tourist), and the generating area having a deficit of that commodity that pushes the individual (Smith, 1990) and the tourism industry is an international industry that involves an exchange in the form of tourist flow. The flow of people (tourist) creates the business environment in the form of goods and information for both generating and receiving area. Most importantly, this interaction brings an exchange between the host and the guest, a monetary component in which the consumer spends money during their temporary stay in the host country, and contributes to the monetary flow of international tourism.

In 2012, the global international tourism

receipts recorded a 4% growth, reaching a total of US\$1,075 billion. However, we have been slow to acknowledge the economic significance of international tourism as an international trade. Although, there are a number of demand studies and geographical literature concentrated on tourism and using data on international tourism flows but most of the literature on international tourism have concentrated on the one-sided tourism demand modeling or spatial-based demand, thus, it failed to show the bigger picture of the international trade of services.

2. LITERATURE REVIEW

Although in recent years, the international trade studies have shown a rapid development in terms of theories, measurement, application and the understanding of intra-industry trade. One of the international trade theories is

Linder Hypothesis (1961), which predicts that countries with similar factor endowments and income levels will trade more with each other. Linder (1961) developed a theory that predicts the occurrence of trade between countries with similar domestic demand conditions and income levels as a result of overlapping demands. With overlapping demand, much of this trade will result in trade within the same category of industry, which explains the intra-industry trade. In Linder's theory, it has been elucidated as to how the demand of a country with a particular distribution depends on the income distribution. For example, rich people demand different products from poor people, and production in any and all countries is designed mainly for the home market while goods that are produced and consumed in two countries will also be traded by those countries. He assumed that a country's producers target most of the production at the average income level of the population which leads to a supposition of a trade pattern where countries with higher income levels (compared to the average) will trade from similar higher income country, and similarly for low income countries trading with other similar low income countries. Linder's hypothesis, therefore, assumes that the consumers' taste depends on the per capita income level, and that production at home depends on these tastes and that trade is a by-product of the home market's production and consumption patterns. In other words, according to Linder, the IIT phenomenon occurs only between countries with similar economic levels.

The next international trade theory is the presupposition of horizontal differentiation in trade flow among countries with similar factor endowments and income levels. By the existence of monopolistic competition with economies of scale in the production for each variety of the good, the demand for horizontally differentiated products is basically driven by consumers' preferences for diversified consumption bundles. Therefore, this type of trade (horizontal intra-industry trade) is expected between countries with similar levels of income. In other words,

countries with similar factor endowments can benefit from economies of scale by specializing in 'niche' products that result in horizontal intra-industry trade (OECD Economic Outlook No.71, 2002:160).

The discussion on horizontal differentiation in trade flow is very much connected to another microeconomic topic, which is the topic of product differentiation. In economics, the product differentiation is categorized into two; the horizontal differentiation which is based on the production of different varieties of a good and the vertical differentiation which is based on the production of levels of quality of a good.

A horizontal differentiation in trade flow fundamentally means that the trade involves products that are produced to increase the variety of the same product. In other words, horizontal differentiation occurs in a market where it is not possible to perceive the quality of a product, resulting in a differentiation in product characteristics such as tastes (e.g. vanilla / chocolate ice cream), colours (different colour scheme for the same product) or in styles (e.g. modern / antique).

Among the earliest theoretical literature on horizontally differentiated products, Dixit and Stiglitz (1977) produced models to illustrate their theory where individuals value 'product variety' in a 'monopolistic' rather than a 'perfect competition' economy. Another alternative model of 'product variety' was produced by Lancaster (1979). There were also models on horizontal intra-industry trade developed by Krugman (1985), Lancaster (1980) and Helpman (1981).

A vertical differentiation occurs in a market where it is possible to perceive a product as being "better" than another. In other words, the products can be arranged based on their quality from the highest to the lowest. The objective of a firm's product differentiation is usually to develop a position that will avoid product commoditization.

Using Richardian and Heckscher-Ohlin model as the fundamental model (which reflects differences in factor endowments, technology

and income distribution), we can explain the vertical intra-industry trade as in the theoretical trade literatures of Falvey (1981), Flam and Helpman (1987), Falvey and Kierzkowski (1987) and Stokey (1991). To illustrate this, it is assumed that on the supply side, the industry is using a labour-capital ratio that is specific to that industry in the production of a good with different levels of quality where else on the demand side, the consumers have the same preferences of consumption bundle and any consumption of a new differentiated product introduced into the market is dependable on the consumer's level of income. In this case, the trade is basically driven by the level of income of the consumer: the higher the level of income of the consumer is, the higher the demand is expected to be. Therefore, this type of trade (vertical intra-industry trade) is expected between countries with different levels of income.

The idea that was drawn from vertical intra-industry trade models can be described as "quality ladder", a term that is usually associated with a situation in the developing countries in which a country's production gradually improves the quality of its exports over time in order to be able to charge higher price for it. For example, country A used to make cheap, thin shirts that usually do not last more than a few months. But as it sells (exports) more shirts, however, it improves the quality that it eventually produces and sells softer, stylish shirts so that it may be able to charge a higher price for the new shirts. In other words, the advanced countries will export higher-quality versions of goods while the lower-income countries export the lower-quality ones until they are able to climb the quality ladder.

As the international trade studies have largely been limited exclusive to developed countries, the presupposition of horizontal differentiation in trade flow among countries with similar factor endowments and income levels has, therefore, long dominated the literature.

3. RESEARCH OBJECTIVES

However, the author found that two issues seem to prevail in this line of research in the international trade. Firstly, the inadequacy that exists in the international trade studies is that these studies usually focused on the trade of manufactured goods and between countries with similar factor endowments or income levels. The term "international trade" usually referred to the international transactions related to goods. Predictably so as the mechanism and pattern of international tourism flows are still based on traditional trade theories which are often biased towards the flow of goods and restricting them from addressing the international trade in services in a more interdisciplinary way which is appropriate to the complexity of the tourism industry.

Secondly, the tourism industry, like many other goods-producing industries, is extremely differentiated, both horizontally and vertically in the demand and supply sides. However, the empirical examination to determine the differentiation of the tourist flows on the international tourism data is sorely lacking as shown in the literature review which the international trade studies have so far been concentrated on developed economies and on the trade of goods. Another concern regarding this issue is the strong idea of presupposition of horizontal differentiation in trade flow among countries with similar factor endowments and income levels.

The aforementioned issues have, therefore, prompted the main purpose of this research, which is to analyze the international trade tourism between countries with similar income levels. With that, the author intends to observe the dynamism between these countries with similar income levels and how the Linder Hypothesis applies to the results. In addition, the author will examine the measurement of trade flow differentiation to see if the presupposition of horizontal differentiation in trade flow among countries with similar income levels applies.

As for the empirical measurements of this

research, the author decided to focus on the tourism industry in the United States of America as the case study. Therefore, the author will make use of the international tourism flow data of the United States of America and its high-income trading partners. The time frame of the data for this research is ten years from year 2001 to 2011.

4. METHODOLOGY

The main data source for this study comes from United States of America Travel and Tourism, Balance of Trade report compiled by the US Department of Commerce, Bureau of Economic Analysis. The data has been collected from year 2001 to 2011. As for other tourism information, the data sources include the United States Resident Travel Abroad report, the Outbound Profile of US Resident Travelers visiting Overseas Destinations and the Inbound Profile of Overseas Travelers to United States report. The two empirical measurements are employed in this study: 1) the classic measurement of IIT, the Grubel and Lloyd's index (1975), and 2) the Greenaway, Hine and Milner (1994) trade flow differentiation.

5. RESULTS

The empirical measurement of IIT phenomenon in the tourism industry demonstrates that there is a high IIT index between the United States with its high-income trading partners. These findings occur as predicted in the Linder Hypothesis (1961) which expects that countries with similar economic levels will trade (in goods) more with each other. The result provides empirical evidence that for the international trade in tourism industry, countries with similar economic levels have high trade/travel with countries with similar economic levels.

Regardless of the years studied, the decomposition results for the tourist flow shows clearly that the tourist flow between the United States of America and the high-income trading partners is made up of vertically differentiated tourist flow. The estimated results do not provide support for presupposition of

horizontal differentiation in trade flow among countries with similar factor endowments and income levels. This is empirical evidence that for the international trade in tourism industry, countries with similar economic levels do trade/travel in goods produced with different levels of quality (the vertical differentiation which is based on the production of levels of quality of a good).

6. DISCUSSION

As put forward by Gray (1970), the theoretical foundation of international tourism transactions is being supported by the international trade theories of goods. Although, we understood that the dynamics of international trade in the service industry should be treated differently from the dynamics of international trade in goods, however, to date, our efforts to make this difference are still left wanting. The findings of this study showed how we need urgently to bridge the knowledge gap that exists in the literatures of international trade of service.

The first empirical result of this research clearly demonstrates that the IIT phenomenon in international tourism flows does occur as expected in Linder Hypothesis. Although the IIT phenomenon does occur as accordingly, it is through the second result of this research that international trade in tourism is fundamentally vertically differentiated was made clear. This result has a high impact on the tourism industry as it meant that the trade model of the tourism industry is a "quality ladder", even between countries with similar economic levels. This shows that the presupposition of horizontal differentiation in trade flow among countries with similar income levels does not applies.

This is an important result that has given us a small opportunity in questioning the suitability of using orthodox trade theory based on the trade of goods to analyze a service industry such as the tourism industry. Tourism industry, with such a complicated network of connecting services, this paper is just a starting point in understanding and analyzing the dynamics of a

service industry. ■

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観光産業における産業内貿易の分析

デミー ウィー エン アン

本論文では、観光産業における産業内貿易について検討を行うとともに、実際の貿易統計を用いてアメリカ合衆国とその32の貿易相手国のケースを中心に、産業内貿易を観察した。

1970年代末から産業内貿易の理論が試みられており、貿易理論の新しい展開が促された。しかし、現代の国際貿易に関する理論の大半が財を中心とし、サービス貿易は産業内貿易の理論の中で大きく遅れをとっている分野である。観光産業は世界のサービス貿易拡大に寄与しているが、今までの産業内貿易の理論が不十分であるといえよう。また、近年産業内貿易の理論は先進国間を中心とする理論が多く、観光産業での先進国—先進国間の垂直的—水平的産業内貿易についてはこれまでほとんど分析がなされてこなかった。

まず、リンダー仮説に基づき、アメリカ合衆国とその32の貿易相手国の産業内貿易における先進国—先進国貿易のケースを代表的な産業内貿易指数であるグルーベル・ロイド指数を用いて分析する。次に、先進国—先進国貿易においてはサービス貿易を垂直的産業内貿易（品質により製品を区別）、水平的産業内貿易（商品属性により製品を区別）に分類し分析を行っている。

基礎データとして、2001年から2011年のUnited States of America Travel and Tourism, Balance of Trade reportを用い、先進国—先進国産業内貿易の性質を分析した。その過程で計量経済分析を行った結果、アメリカ合衆国とその貿易相手国の産業内貿易におけるグルーベル・ロイド指数が高いことが明らかになった。また、先進国—先進国貿易が垂直的産業内貿易（品質により製品を区別）であるという結果が導き出された。

キーワード：産業内貿易，リンダー仮説，グルーベル・ロイド指数，垂直的産業内貿易，水平的産業内貿易